

In the name of God



Sharif University of Technology

Phormer

A PhotoGallery Manager

Presented to:

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Group Members Information

Group Number: 7

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Proposal Presentation

Phormer is an online “photo gallery manager” in PHP language which can be installed anywhere on the web with an Apache service in order to upload, categorize, edit and serve the digital photos.

Here, for the course “System analysis and design”, Phormer project is presented to [Dr. Habibi](#) and his teacher assistant [Mr. Shamsaei](#). Actually, Phormer’s first design was on Jan. 2006 and its releases continued to Jan 2007 on [SourceForge.net](#).

This way, although the project is already in the **release** state, the reason I picked Phormer as the final project of the course was that I believed I can affect the “*new look to design and analysis*” (which I’m learning through the course) to this project and implement new thought to **rebuild** the project. Thus, I wish Phormer be well-designed (i.e. structured as a nice project), documented and feature-full (i.e. supporting new database systems like MySQL and etc.) by the end of this Project.

Review’s History

Version	Reason of Updating	Update Date
1.0	Initialing the report, first version	Dec 11, 2007 (۲۰ آذر ۱۳۸۶)
2.0	Changing the timing table	Apr 1, 2008 (۱۳ فروردین ۸۷)

1 History and current works

Phormer, as said, is an OpenSource Online PhotoGalleryManager (PGM). There're other similar projects in this field (PGM) in SourceForge.net (Forge of OpenSouce projects) like follows. Rank is project's ranking among ~164,000 active projects of SF.net¹.

- **Gallery**: Rank:351 Downloads: ~7,000K since Jun 2000, Last Update: 3 months ago: is the most popular photogallery manager. Lots of themes and translations (to 26 languages), which is due to enormous work since Mar 2003, is its masterpiece.
- **Coppermine**: Rank: 123, Downloads: ~4,200K since Sep 2003, Last Update: 2 weeks ago: is another known and famous Photo Gallery Manager. It has more than 40 translations (even to Persian) and ~150 themes and so is growing faster than Gallery with millions of downloads
- **SPGM (Simple Picture Gallery Manager)**: Rank: 5172, Downloads: 205K Since May 2002, Last Update: 11 months ago: is a light and using PGM which is less known in compare to first two.

Though, the most brilliant (and identifying) features of Phormer in compare to mentioned projects can be named as below.

- **Phormer**: Rank: 5788², Downloads: 8869 Since Sep 2006, Last Update 11 months ago:
 - **Light Weight**: Phormer's entire package (last stable release) is ~120KB while Coppermine's last version is ~3.4MB and Gallery is 10.1MB!
 - **No need to MySQL**: All of the three mentioned PGMs and most of the other common ones need MySQL as the database but Phormer uses its own exclusive XML format. By this feature, Phormer can be installed in any server (like our one at CE department of Sharif University) with no require for MySQL account permissions.
 - **Functional update, edit and help system**: Which caught by various testimonials from end-users.
 - **Ajax upload and Mass upload**: These features were added due to user requests and improve add/upload system much.

¹ All the data is gathered on Dec 12 of 2007.

² It became 917 on its last release and since It's more than 11 months since last time, the ranking is going worse day after day.

- **More** can be found at project's [home](#).

Beside of all, It's nice to mention Phormer's very first structure and design was implemented on Jan 2005 as an etude to PHP-learning. It used MySQL at that time and had no edit, delete feature! Just for the sake of single use, it never published anywhere (including SF.net). On Jan 2006, Project renewed with a brand new database system, features and User Interface. Actually, no code of very-first Phormer (namely Phormer 1.0) was used in later versions (Phormer 2.0 and currently Phormer 3.0).

2 Definition of the Project

2.1 Project Overview

As mentioned, Phormer is on a stable status of development but it has lots of bugs, lacks and feature-requests. Most of these wants are because of lack of knowledge of the developer of *Modern approach of System design* or *System thinking*.

Through this renewal/review of the project, I'm supposed to rebuild entire architecture of the system to an structured and documented format. Also, support of template based themes and MySQL is in the agenda.

2.2 Project Goals

With the documented and structured redesign, Phormer may have the chance to become more popular among SF projects and get higher rankings. It may get financial incomes and awards also, as other *good* projects achieve everyday at SF.

Also, 4 current translations (French and Italian 90%, Turkish and Dutch 20%) will be generally supported (by gettext module of PHP) and international releases will help to distribute the usage of Phormer.

Beside of all, such valuable project can be utterly a point of refer in developer's CV for further job opportunities apply.

3 Design of the Project

Similar projects and current state were described in **Project overview** part.

3.1 Project Management

Phormer is a single-developer Project at the moment and the management is done by author. However, communication with translators from world-wide is established via email.

3.2 Deliverable Items

All package release will be published both on Project's [download part](#) of SourceForge.net and will be given to the Teacher Assistant (Mr. Shamsaie) via email or CD. These Packages will include stable (ready-to-install and use) releases, translations and documentations.

Unfortunately, Only French translation (help system) could be get by Clément Hussenot <chussenot@emeth-animation.com> and Masoumeh Nazarian <masi000@gmail.com>

3.2.1 Translators (updated on 06 April, 2008)

- French: [Status: help system done]
 - Masoumeh Nazarian <masi000@gmail.com>
 - Revision: Clément Hussenot <chussenot@emeth-animation.com>
 - Revision: Bozzo Leclown <bozzo_leclown@hotmail.com>
- Italian: [Status: partially completed]
 - Author: Alessandro Nuzzo <ale@aleinside.net>
 - Revision: <alessandro.pedroni@gmail.com>
 - Revision: Ugo D'Ambrosio <compax@gmail.com>
- Serbian Cyrilic [Status: Help system finished]
 - g.ristovic <g.ristovic@ptt.yu>
- German: [Status: abandoned]
 - Steven Schummer <zapoThec@zapculture.de>
- Spanish [Status: just started]
 - Author: Bernardo Rotelli <bernardo.rotelli@gmail.com>
- Turkish [Status: just started]

- <inovasyon@gmail.com>
- Polish [Status: just started]
 - Remigiusz Waszkiewicz remiwasz@gmail.com
 - Aleksiej Kurakin <aleksiej.kurakin@gmail.com>
- Slovak [Status: just started]
 - Igor Serátor igor.s@centrum.sk
- Czech [Status: just started]
 - Jarda <babice69@volny.cz>

3.3 Packages and Dues

Phormer is going to be released as one single stand-alone package. The deadline of its sub-procedures will be noted in later parts. Translation's actions will be considered as parallel work to the developer's.

3.4 Tasks and Dues

Current tasks of the project can be divided into several sub procedures along with translation. They are shown in below table. Dates are in Persian (Jalali) Calendar.

It's based on 15 weeks period to 4th of Esfand of 1386 but the work didn't continue base on that, due to translation delays and problems and expansion of the deadlines.

Task	9/24 - 9/30	10/1 - 10/7	10/8 - 10/14	10/15 - 10/21	10/22 - 10/28	10/29 - 11/5	11/6 - 11/12	11/13 - 11/19	11/20 - 11/26	11/27 - 12/3
Fixing Essential Bugs and reviews				OFF, Due to Final Exams						
Preparing Files Format for Translation										
Revisiting database and MySQL support										
Adding essential feature requests										
Importing and fixing translations										
Finalization of the package										
Translation to French										
Translation to Turkish										
Translation to Portuguese										
Translation to Dutch										

[illegible]

3.5 Benefits of the Project

As mentioned in “Project Goals” part, not only learning the new methods of system design will be achieved through this project, but also success of this project in SF.net area may have (financial) donation/awards. Regards to these two, such project is a heavy point of experience in PHP development in later job applications.

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4 Resources Cost

4.1 Human Resources

Single developer of Phormer is man of all job. He should attend ~200 hours: 20 hours for each green cell of schedule and 10 hours for each blue cell (initiation). Translators also should attend ~40 hours each (10 hours per week).

4.2 Financial Resources

Phormer is an Open-Source software and thus it has no cost and no benefits in very outer level of view. If the developer were hired, the wage of him would be about $200\text{hours} * 50,000\text{Rls/hours} = 10,000,000\text{ Rials}$ and about $40\text{hours} * 15\$/\text{hours} = 600\$$ for each translator, but fortunately translators are volunteers and developer is the project manager itself and no financial engagement is inside.

5 Software Requirement Specifications Report

Review's History

Version	Reason of Updating	Update Date
1.0	Initialing the report, first version	Dec 18, 2007 (۲۷ آذر ۱۳۸۶)

1 Introduction

1.1 Goals

As said before, Phormer is already achieved a stable status and is ready to download and use. This report is going to introduce its current status and later its improvements like added features and for example MySQL support details will be added to this chapter.

1.2 Reviewers and Suggestions

This review has been written for both the project over viewer/supervisor (Mr. Shamsaie) and technical readers whom may be interested in following Phormer.

Technical readers may also like to check comments inside the code and readme files about how-to install, modify and improve the project.

Finally, installing a copy of Phormer before engaging with it is recommended.

1.3 Area of the project

Phormer project is a web-based Content Management system designed to manage photos on the web.

Actually, with help of Phormer, user can store, edit, add description and trim your photos to be shown on his website. Later visitors of his website can rate or leave comments to his photos and have communication with author.

Phormer's growth direction is on adding more features and supporting more databases/platforms in order to generalize the use of it. Also translations of Phormer to local languages helps spread of it.

2 General description

2.1 Overview of the production

The new release of Phormer (which is the aim of this project) is going to be an improved version of last release of which lots of bugs removed and new features added.

This way, for who already use it, it's a valuable update but for first-time users, it's going to be a nice PGM with lots of useful features and facilities.

Finally, Phormer is going to become more attractive to translators of other languages and the ranking of it, also, in SF is considered to become quite better.

2.2 System features

Specification and features of Phormer are completely mentioned in Part 3.

2.3 User groups and their specifications

Users of Phormer are not bounded to a very specific group of people in special places. Anyone from all around the world has access to a PHP-supporting website can download and use it.

Also, after various translations of the project, number of localized users (who deal with its local translated version) grows day by day.

2.4 Working environment

Phormer is written by TextPad and Notepad++ editors and PHP files are locally parsed by easyphp web-server in Ms. Windows XP. These are the specification of developing applications.

But, on the other side, as mentioned before, users do need a PHP-parsing server (e.g. Apache) and a write-access to there. No more specified issues (like MySQL account or domain configurations) is needed.

2.5 Limitations of design and implementation

Phormer project is a web-based Content Management system. It's designed to manage photos on the web. Hence, the direction of growth of Phormer is on adding more features and supporting more platforms of photo managing.

2.6 Considerations and dependencies

A Phormer sever is considered to support PHP 4.3.0 or later version.

Also, user is supposed to have little information about file managements, i.e. FTP connection (to install Phormer), creating folders and doing chmod.

Finally, basic knowledge of English is going to be eased by translations.

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3 System Features

In this part, 7 most brilliant features of Phormer will be noticed.

3.1 Feature 1: various database options

One of the most rigid difficulties of common PGM applications is their need to a strong database system like MySQL. This need prevents users of PHP-w/o-MySQL accounts (like department accounts inside Sharif and other universities) to use the application. Fortunately Phormer has solved this problem via using XML files of the exclusive format.

3.1.1 Description and Priority

Phormer stores all the entered/gathered data in XML files and reads from and write to them by XML parsing support of PHP. The data includes name, date and description of the photos as well as categorizes and statistics.

With help of a built-in XML editor, user can modify or back-up the files anytime he wished from the administration area.

One of the key features of coming package (which is supposed to be presented to Dr. Habibi and Mr. Shamsaie) is to support MySQL as well as XML in order to increase reliability and performance.

The priority of this feature is 1.

3.1.2 Sequence of actions

As database is in the most bottom (far to user) layers of design, user never engages it by default. However, to place a hand in the data or copy/move the database, user can simply find XML files in data/ folder of the installation path.

3.2 Feature 2: Fast and easy installation, update and uninstall

Installing Phormer is so fast and easy. Actually, being a light package and general usage had been one of most important features of Phormer from the very first of analysis.

Also is updating the package – the steps of update is very similar to installation and has been mentioned in readme.txt file of the package.



Finally, uninstall action (which sometimes can be done by removing all files, due to the permission of the owner the files, php-server) can be done from inside the administration area with a nice UI.

3.2.1 Description and Priority

As it said in the readme.txt file of the package, it can be done in 3 short steps:

- a) Download the latest version of phormer###.zip from <http://p.horm.org/er>
- b) Unzip Phormer###.zip file (~90KB) to the destination folder on your server (e.g. /var/www/photos). (i.e. type this command: "unzip phormer###" in the shell).
- c) Load that by a web browser (e.g. <http://somewhere/photos>) and fill the short form of preferences.

As said, this feature is one of the most important features of Phormer, as lots of similar packages has problem in this part (i.e. installation) and lose their users very easily via difficulties of installation and configuration.

So is update. Phormer stores all the gathered data and photos in two separate category (to PHP files of the application) and thus update would become overwritten the new application files on the previous ones.

And for uninstallation, which is sometimes a serious action, a button in administration area has been assigned. The reason for that is ownership of the files created by php-server (i.e. gathered data or resized thumbnails) is to php-server (apache, php or etc.) and no one else can remove them.

Hence, it's priority is 2 (out of 9).

3.2.2 Sequence of actions

Installation is the very first action of a user, so anyone who likes to use Phormer will engage with it.

Whenever new update were available, it will be noted to user in login page and user can easily update the application in less than 3 minutes to have latest features and least bugs.

Finally, if user disliked the package or wanted to move it to somewhere else, dedicated uninstall button is a real need.

3.3 Feature 3: Fast and valid HTML pages

Table-less and human-made XHTML codes for both admin and visitors page, leads faster and cleaner pages which are tested in common browsers. Also the image-less and comfortable administration region has provided very fast and exact navigation while uploading or editing items as admin.

3.3.1 Description and Priority

Having browser-compatible pages had been as essence rather than a feature. Lots of similar packages mix up in either Internet Explorer or FireFox (as two most common web browsers) while Phormer is tested in both and were successful.

But, table-less pages are a feature as fastens the loading time of the page very much due to the algorithm of loading the page in browsers. Human-made code with CSS support is also another reason of fastening the loading time.

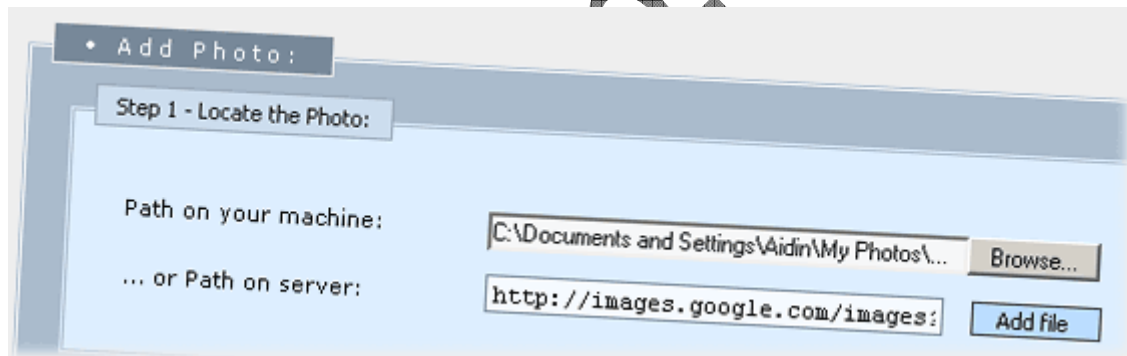
The priority of this feature were 4.

3.3.2 Sequence of actions

User doesn't need any action to use these features as they are embedded improvements.

3.4 Feature 4: Excellent upload manners

File upload is the key part of a photo gallery manager. Users may like to upload several photos at once, add too many (e.g. 100) photos which are zipped quickly and gather the files from another website (e.g. add results of google image search to his photo gallery). All of these methods are properly supported in Phormer.



3.4.1 Description and Priority

Not only from FTP by copying the images, but also from inside the administration area you can upload the photos. This option is not a masterpiece before using AJAX. Actually with help of AJAX technology user can have simultaneous uploads of many photos. And, finally user can have mass upload – many photos in one zip file and Phormer unzips the file after upload inside itself and place them all in drafts (ready-to-be-added) folder. All of these uploading phases can be performed either from local machine (browsing the files) or from another website (e.g. <http://someotherplace.com/photo.jpg> be uploaded to the photo gallery).

Priority of this feature can be consumed 2.

3.4.2 Sequence of actions

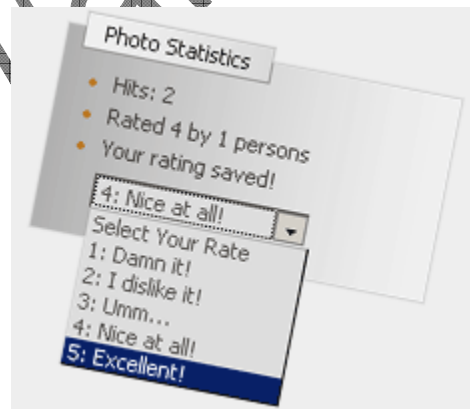
After logging in the administration area, upload link can be seen next to drafts folder. Navigating there, with useful “help” buttons, user can find out that uploading is very easy, just browse the file from local machine or add the URL of the photo and then hit “upload it!” button.

3.5 Feature 5: Nice interaction with visitors

Admin of a PGM likes to have rating, comments and statistics of the visitors. Phormer manages all of these properly.

3.5.1 Description and Priority

- **Comments:** in UTF-8 encoding (which support Persian and other languages) can be left by any visitor to be shown to admin and other visitors. Having a **Word Verification** feature prevents spasm from commenting. Also, admin has control of disabling commenting for each single photo.
- **Rating:** with help of AJAX technology, rating a photo by a visitor doesn't need an entire reload. It's just selecting a rate from the drop down menu and nothing more. Connection to server (where stores ratings) will be accomplished in the background.
- **Statistics:** not only number of hits of every single photo, but also last visit of each photo and lots of admin-side data (like EXIF info of digital photographs) will be gathered by Phormer automatically and will be used to build a template of first page – user can set a group of recently-visited photos be shown in the first page.



Priority of this group of features was not so high because they were not on a path of need: 5.

3.5.2 Sequence of actions

Admin (user) doesn't need to do anything to use this feature. However, yet he can disable some of them. Statistics of each photo can be seen in its detail and new comments will be notified to admin after logging in to the administration area.

3.6 Feature 6: Categorization with hierarchy and privacy

Having two separate categorization method will lead to handle everything in the most right place – User can both categorize your shots by Category (e.g. black and white, self-

portrait, etc.) and, on the other side, by date (which named story), just like the posts of a weblog.

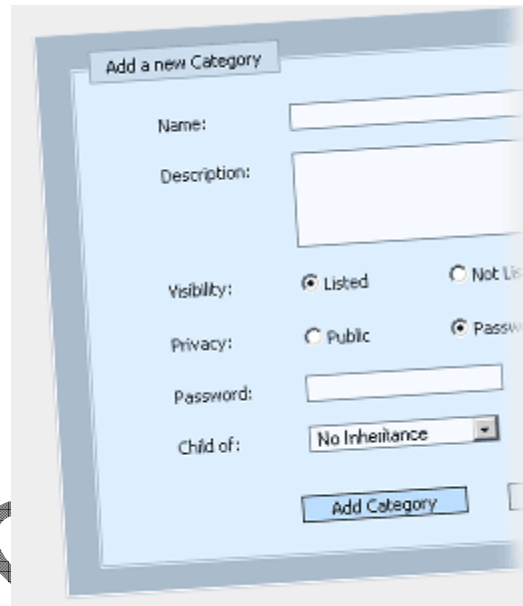
3.6.1 Description and Priority

Categories and Stories, as introduced, are two methods of grouping shots in order to show them to visitors properly as user wishes. Actually each photo has at least one category and at least one story to be placed in.

Other opportunities of this system are:

- One photo can be placed in several categories and/or several stories.
- Categories, as well as stories, can be hierarchical – building a tree.
- Categories, as well as stories, can be passworded, so that visitors will be requested for the particularly dedicated password of that category/story to view their photos.

Finally the priority of this feature is 4.

A screenshot of a web form titled "Add a new Category". The form has a light blue background and a white border. It contains the following fields: "Name:" with a text input box; "Description:" with a larger text input box; "Visibility:" with two radio buttons, "Listed" (selected) and "Not Listed"; "Privacy:" with two radio buttons, "Public" and "Password" (selected); "Password:" with a text input box; "Child of:" with a dropdown menu showing "No Inheritance"; and an "Add Category" button at the bottom right.

3.6.2 Sequence of actions

Admin (user) can control categories and stories in their appropriate part inside the administration area. Here, control is to add, modify or delete groups.

3.7 Feature 7: Automatic Thumbnail Generation

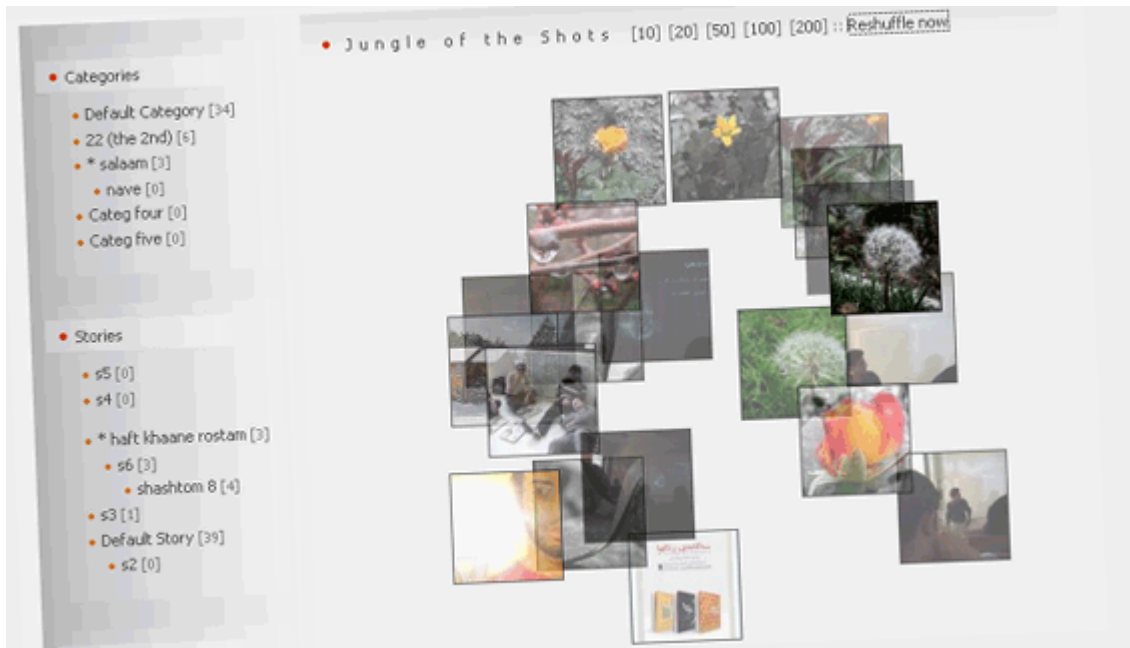
Generating resized and cropped thumbnails of the uploaded photos will be performed automatically by Phormer. User (admin) can select the cropping area of the photo with a handy cropping tool inside the administration area.



3.7.1 Description and Priority

Easy WYSIWYG Part-of-Image Square-Thumb maker tool helps user to create the best square thumb from your shots which is best-fitted and much more catchy. Various sizes of whole image can also be generated, beside.

Actually, square thumbs are shown be one of the best thumbnail sizes for all the images. Having part (not all) of the photo make visitors athirst for the entire photo.



Finally the priority of this feature is 3.

3.7.2 Sequence of actions

Admin can face with that thumb-pick tool on each photo-add action unless he picks mass-add (from drafts) in which the middle part of the shot will be picked.

4 External Interfaces

4.1 User Interfaces

The exclusive UI for both admin (inside) and visitors (outside) are already designed and analyzed. As the entire project is a web-based application, all the communications with user and visitors are through the web and handy web-UIs as the essence of the project were properly been concerned.

Also, a very useful feature of “help” were placed everywhere in the UI in order to remove any ambiguity and answers probable questions of the user.

4.2 Hardware Interfaces

A common web-server computer with hard disk drive is the all Phormer needs. No more hardware related stuffs may ever be required for such Content Management project.

4.3 Software Interfaces

Phormer is a stand-alone project which needs a web-server only. Supporting PHP 4.3.0 or higher by web-server is a need and following module of PHP is required:

- **PHP_GD:** in order to let PHP read jpg files and create new thumbnails.

Following modules (extensions) of PHP are not critically required but strongly recommended:

- **PHP_EXIF:** this modules helps Phormer to read EXIF data of digital photography files like focusing length, flashing mode and shutter speed. This data are often written beside the photo in one single jpg file.
- **PHP_ZIP:** without this feature, mass-upload (uploading several photos in one single zip file) is not supported by Phormer.

Finally, to use MySQL database, having it installed and configured to web-server is also needed.

4.4 Communication Interfaces

Phormer is a web-based application and it works on the web. Here, web can be a local network or the WWW. Hence an HTTP server is a trivial requirement of the system.

FTP connection is recommended for installation and copying files, however sometimes an HTTP control panel may also let file upload.

A mailing server may help system to notify admin of important actions/problems/news of the PGM. This feature is not currently supported and is in feature-request list of Phormer.

4.5 Other specifications

No more specification is to mention at the moment - All covered in User, Communication and H/S interfaces.

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5 Process and Logic Modeling (DFD)

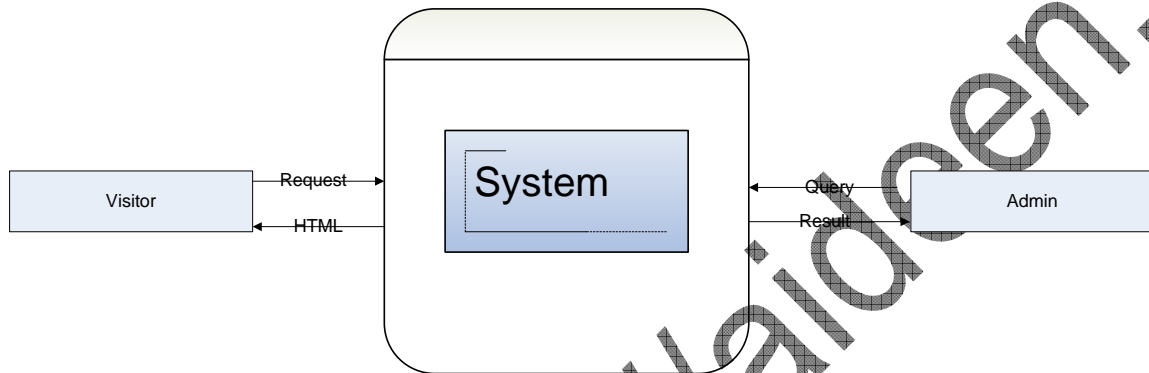
Review's History

Version	Reason of Updating	Update Date
1.0	Initialing the report, first version	01 April, 2007 (۱۳ فروردین ۸۷)

5.1 Context Diagram

As you know, Phormer is a CMS having a back-end of Admin side and front-end of Visitor side.

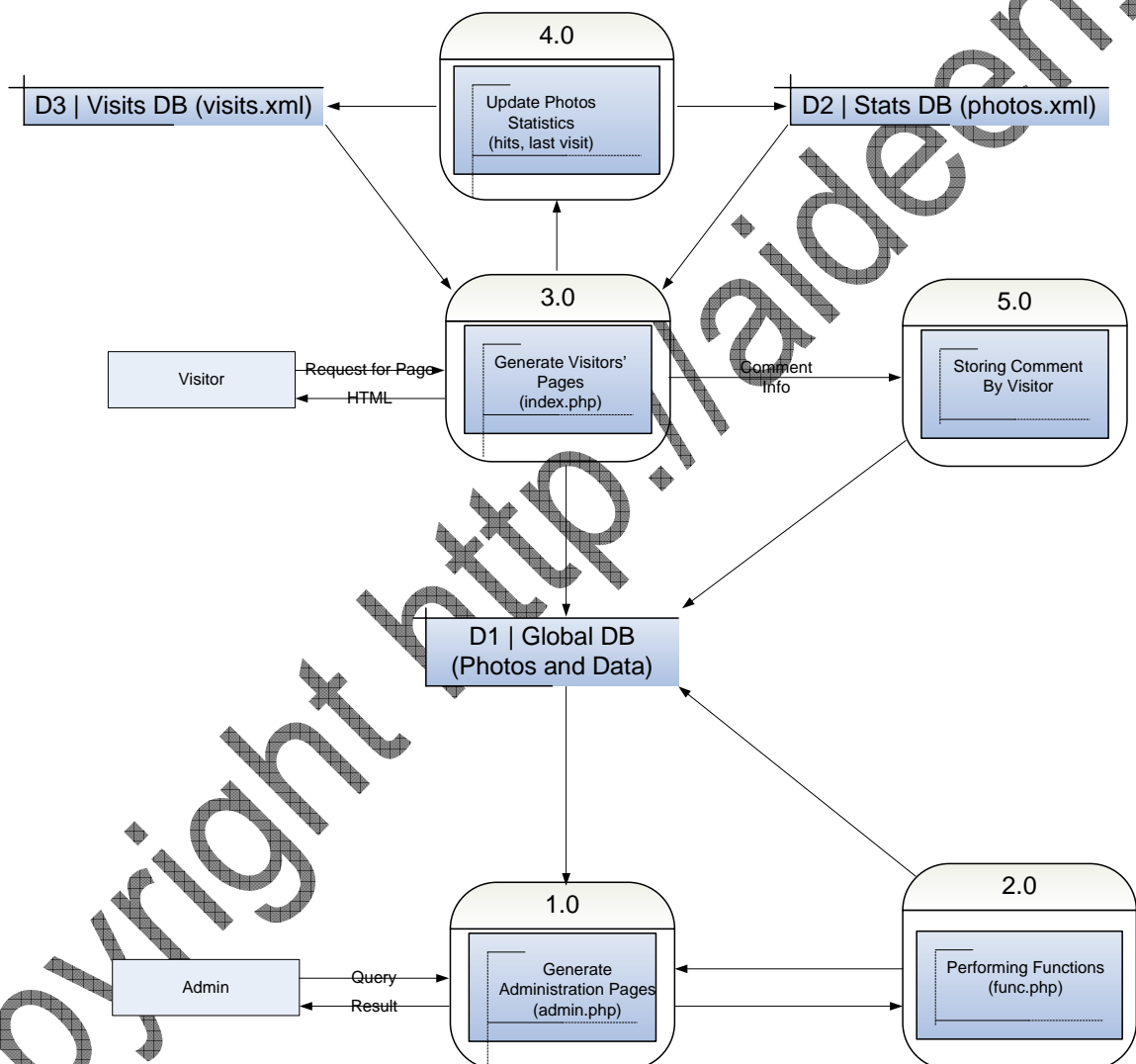
Visitor requests HTML files from system to visit while Admin sends Query and expect the result (though, yet, HTML).



5.2 Level-0 Diagram

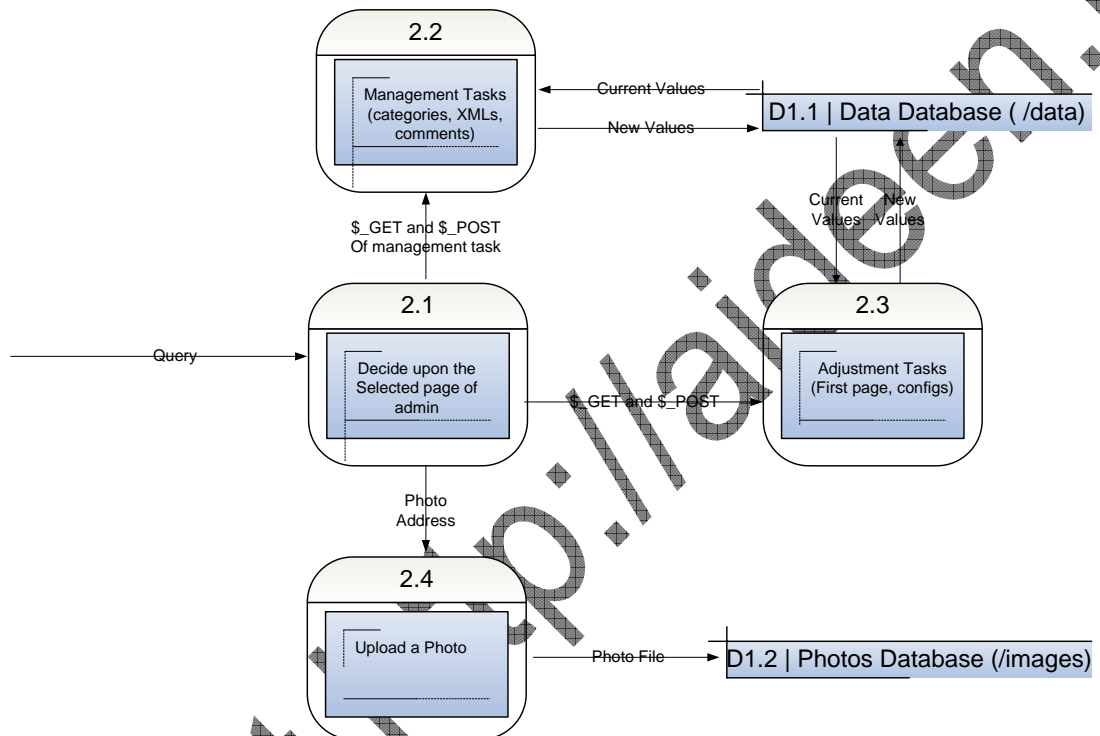
Splitting use-cases of “Visitor’s visit” and “Admin actions”, we can reach this DFD.

As you see, Visitor and Admin are Shared in D1, Global DB (which later decomposes into many smaller databases like photos.xml, categories.xml and etc.)



5.3 1st Level Diagram of 2.0 (admin.php - func.php)

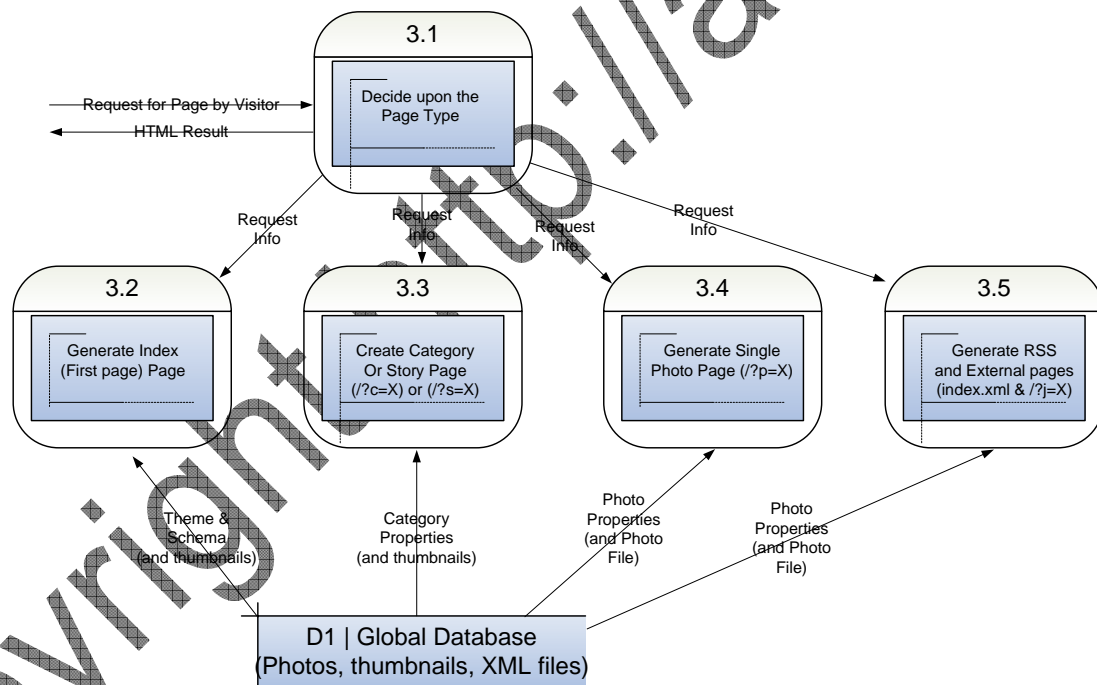
Admin's actions is as below. Later, 2.2 (Management), 2.3 (Adjustment) and 2.4 (Upload) will be zoomed.



5.4 1st Level Diagram of 3.0 (index.php)

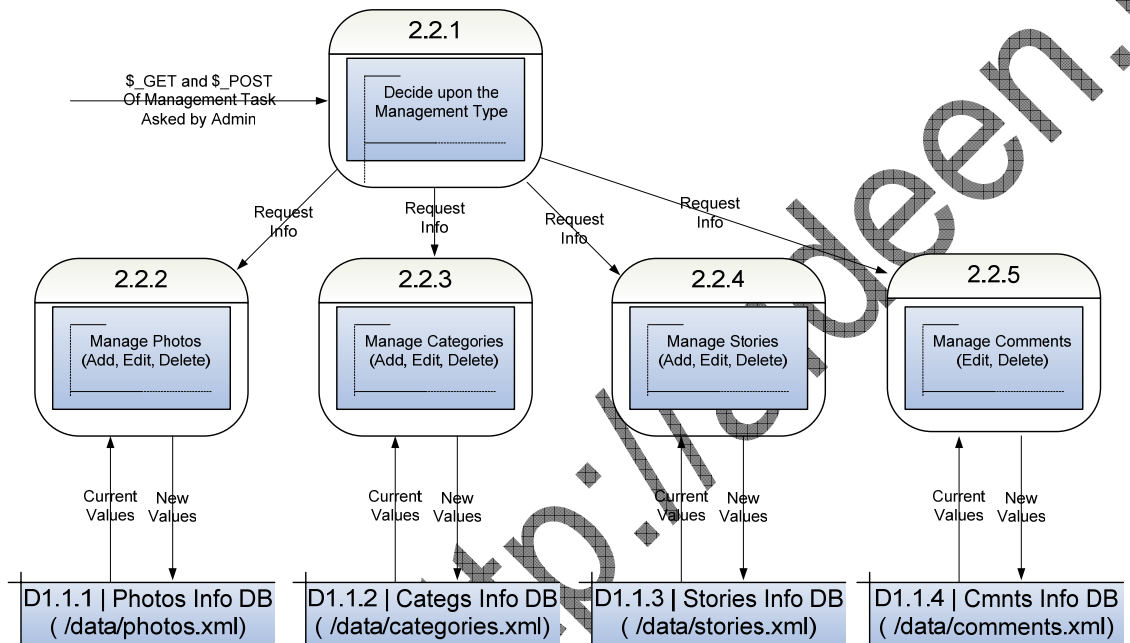
Output pages of index.php can be various kinds:

- Normal mode (index.php) which should be as set in theme part of basis.xml (adjust preferences of admin part). For example, Jungle Mode, most recent visiteds, most recent adds, etc.
- Entire one Category (index.php/?c=X where X is category-id) or Entire one Story (index.php/?s=X where X is story-id)
- Single Photo (index.php/?p=X where X is photo-id)
- Export (external) mode (index.php/?j=X where X is photo-id) and also create RSS (index.xml) file



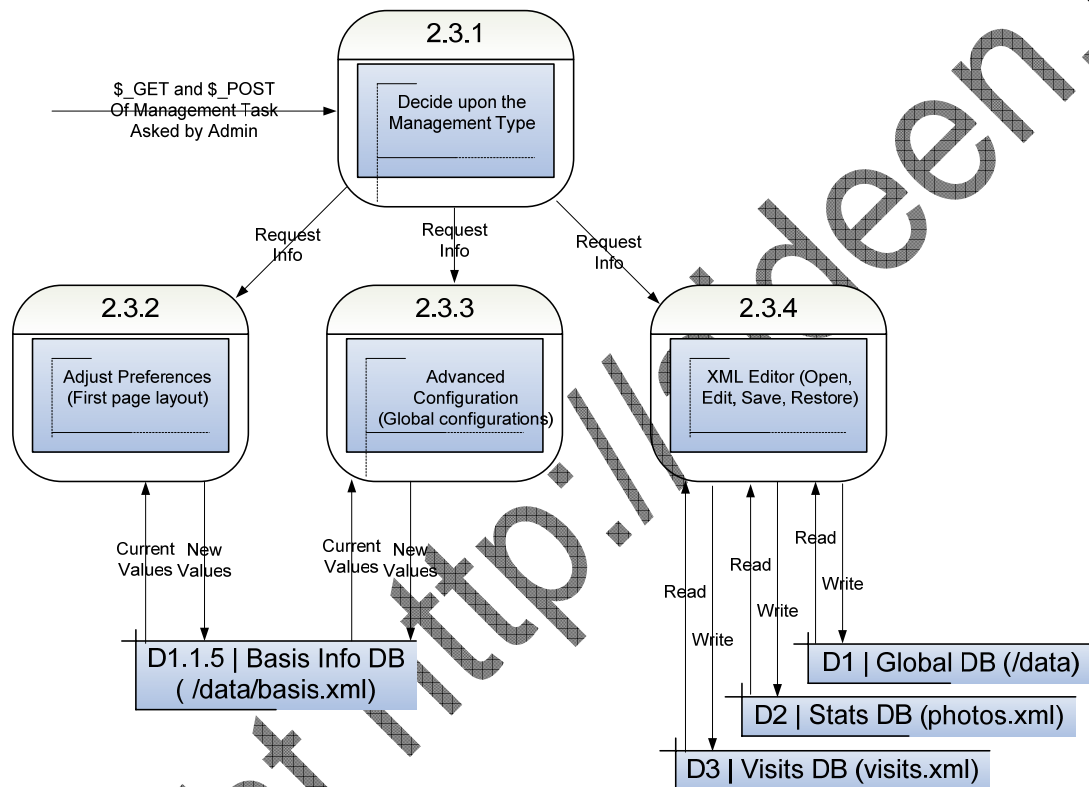
5.5 2nd Level Diagram of 2.2 (Management Tasks)

Management tasks (as seen in administration area) are of 4 types (excluding drafts which are not database-related).



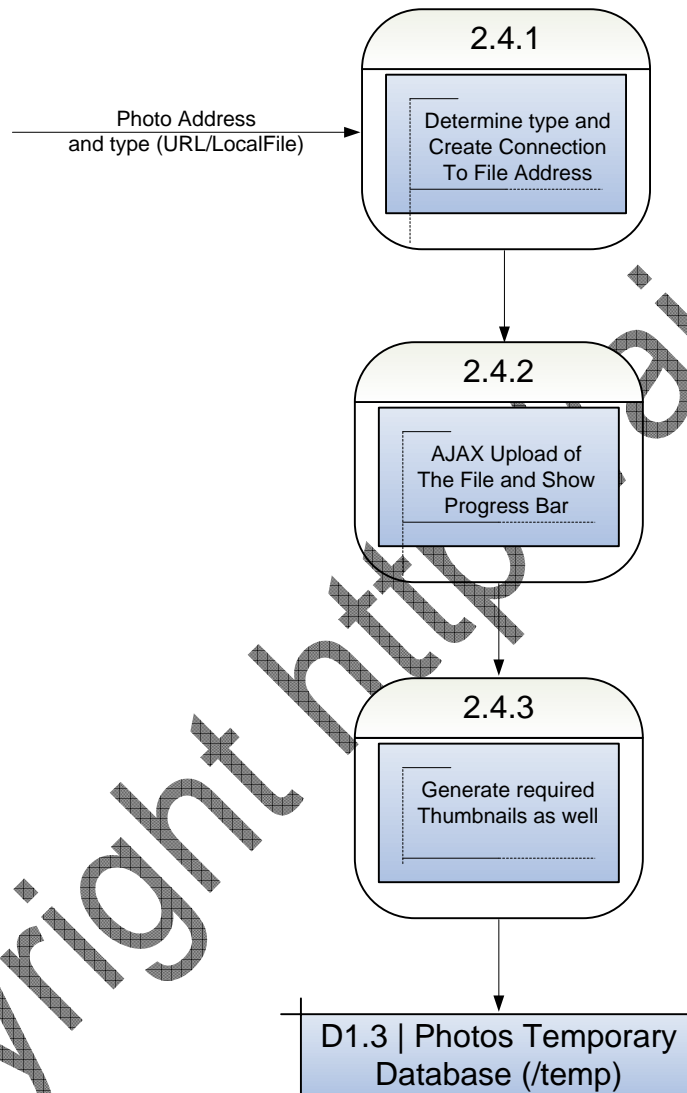
5.6 2nd Level Diagram of 2.3 (Adjustment Tasks)

Adjustment tasks are configurations of Phormer and layout, as well as XML Editor which lets edit and restore over all XML files of all databases



5.7 2nd Level Diagram of 2.4 (Photo Upload)

The process of uploading a photo (either from local machine of user, or from a URL on the web) is as follow.



6 Conceptual Data Modeling (ERD)

Review's History

Version	Reason of Updating	Update Date
1.0	Initialing the report, first version	01 April, 2007 (۱۳ فروردین ۸۷)

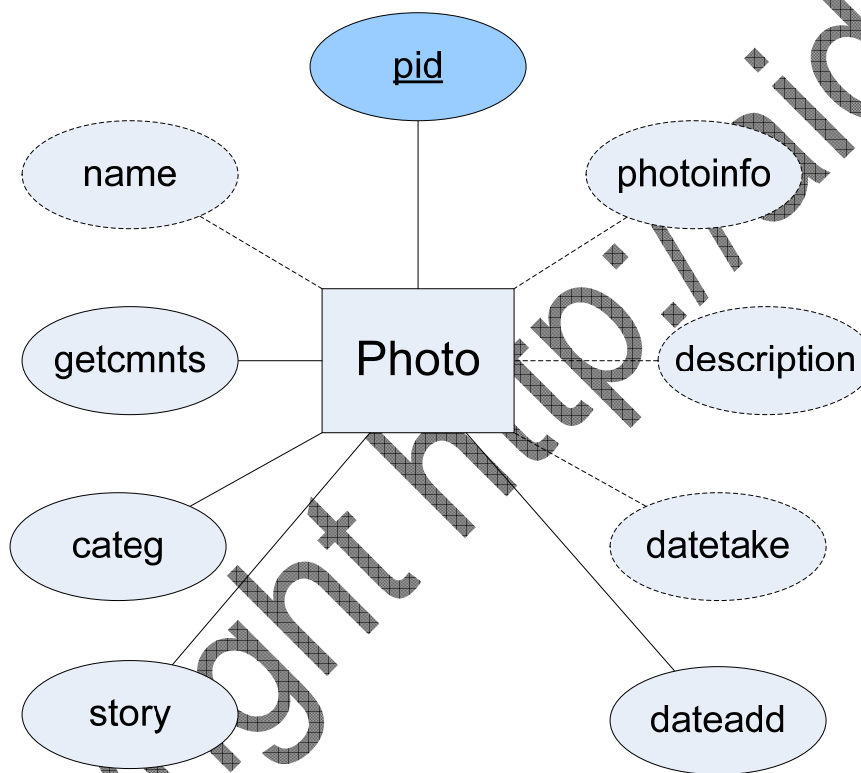
6.1 Introduction

In the part, ERD Diagrams are shown. As the DB is not going to be necessarily Tabular, it may look different than natural meanings.

6.2 Entities

6.2.1 Photo (P_?????.XML)

Photo is the most basic and major entity of Phormer.

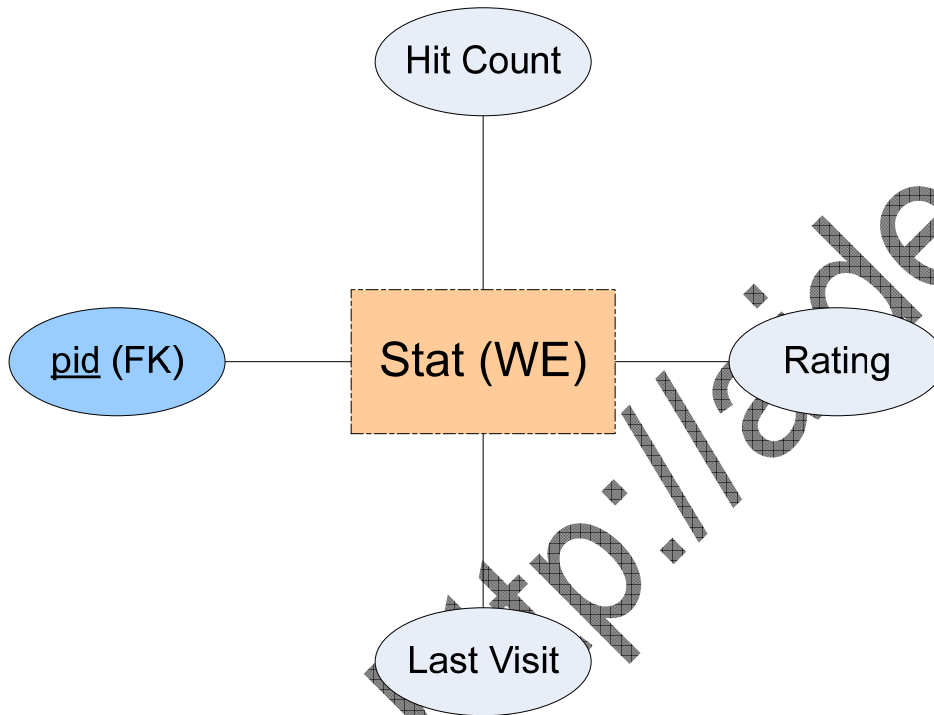


- **name:** name of the photo
- **getcmnts:** a Boolean identifies whether this photo gets comment or not
- **categ:** MAIN category of the photo
- **story:** MAIN story of the photo
- **photoinfo:** EXIF data and technical information about the Photo
- **description:** description of the photo
- **datetake:** date it has been taken
- **dateadd:** date it has been added

6.2.2 Stat (photos.xml)

Stat is a Weak Entity for Photo, keep in external database of photos.XML

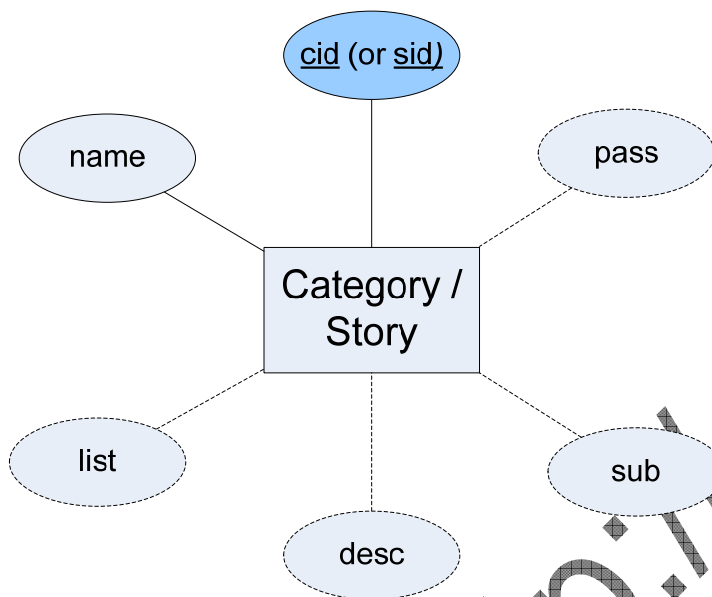
Pid is a Foreign key for this entity.



- **Hit Count:** number of visits
- **Pid:** foreign key (the photo this stat belong to)
- **Last visit:** Last time the photo has been visited
- **Rating:** rating of that photo by visitors (including number of raters and sum of them)

6.2.3 Category / Story (categories.XML and stories.XML)

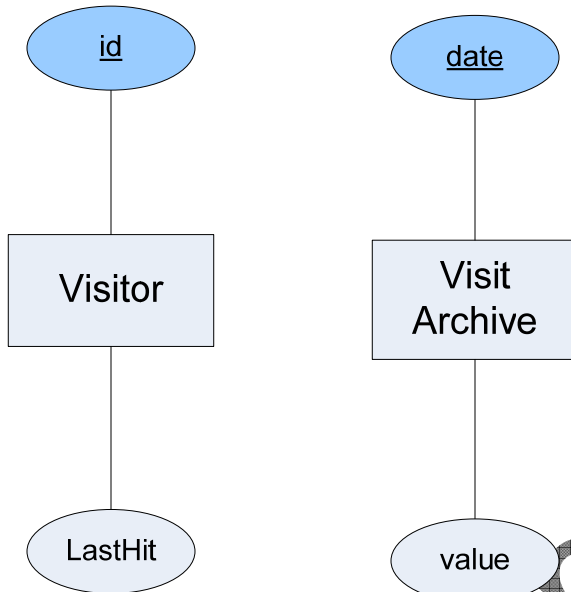
Category and Story are both two containers (sets) of Photos. The difference between them are only in logical design not physical part.



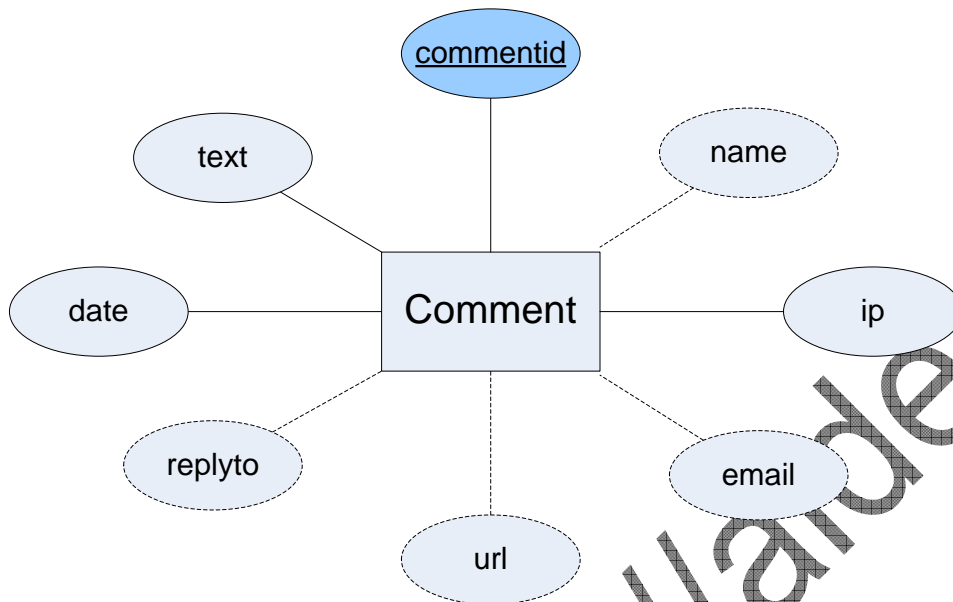
- **Name:** name of the category/story
- **Desc:** description of it (text)
- **Sub:** the father of it (-1 for none) in hierarchical tree
- **List:** whether it should be listed or not
- **Pass:** the password (null for public), visitors must enter to see this

6.2.4 Visits and Visitors (visits.XML)

The first entity (visitor) helps to determine online visitors of the site and the second entity (visit archive) holds archive of statistics (per day).



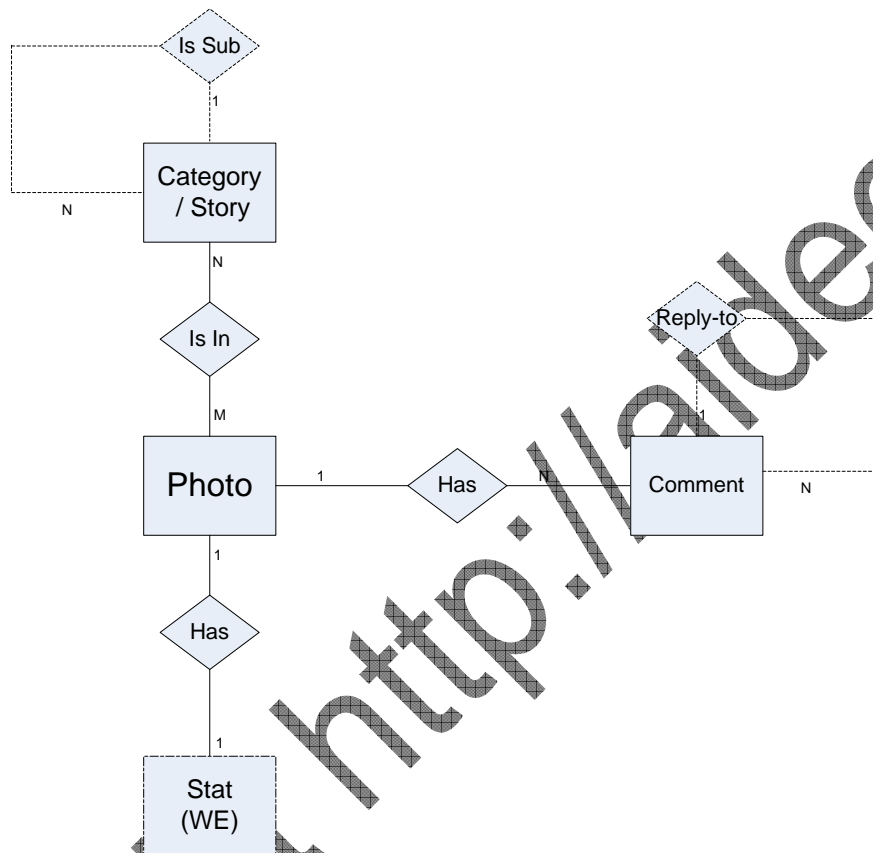
6.2.5 Comment (comments.XML)



- **Name:** name of the commenter
- **Ip:** IP of the commenter
- **Email:** email of the commenter
- **url:** homepage or URL the commenter entered
- **reply:** id of the comment, it's a reply-to of that (-1 for start of a thread)
- **date:** date of comment
- **text:** body of comment

6.3 Relations

Putting “Photo” entity in the middle of the system, all relations can be figured as below.



7 Designing Interfaces and Dialogues

Review's History

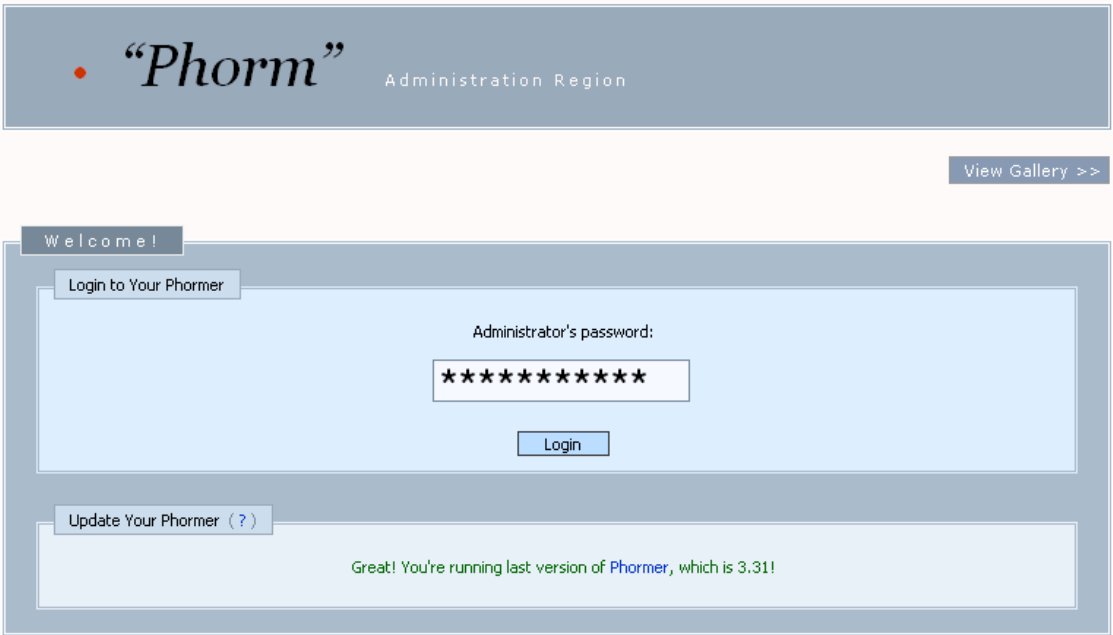
Version	Reason of Updating	Update Date
1.0	Initialing the report, first version	01 April, 2007 (۱۳ فروردین ۸۷)

7.1 Introduction

As Phormer had been previously designed (mostly about UI), in this part we just introduce the UI components it has.

7.2 Administration Area

7.2.1 Login Page



The screenshot shows the 'Phorm' Administration Region login page. At the top, there's a header with the 'Phorm' logo and 'Administration Region' text. A 'View Gallery >>' button is in the top right. Below the header, a 'Welcome!' message is followed by a 'Login to Your Phormer' button. The main login area contains a label 'Administrator's password:' above a password input field filled with asterisks. A 'Login' button is positioned below the password field. At the bottom of the login area, there's an 'Update Your Phormer (?)' button. Below this, a green message states: 'Great! You're running last version of Phormer, which is 3.31!'. At the very bottom, a footer line reads: 'This PhotoGallery is powered by Phormer, a simple PHP Photo Gallery Manager, under GPL.'

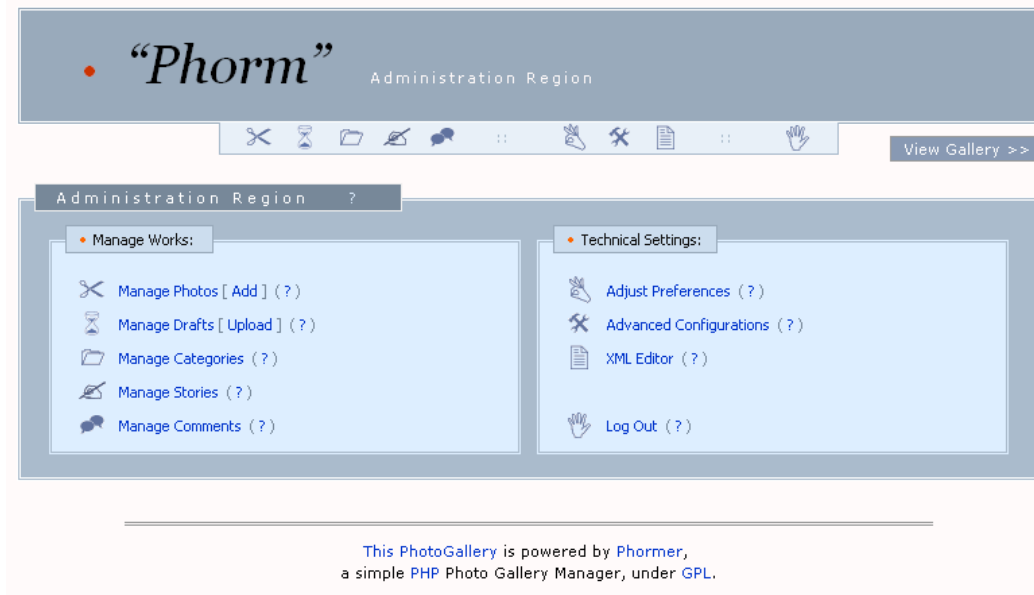
One idea in this page is Automatic update by connecting to Phormer's home in case internet connection be available.

A short bar of "view Gallery" is in always in upper right side in administration area.

Finally, the focus of the browser automatically sets to password box, so he just can type after loading the page and doesn't need to click on the box (or press tab several times).

7.2.2 Main menu of Administration area

This area is the first menu, seen after logging in.

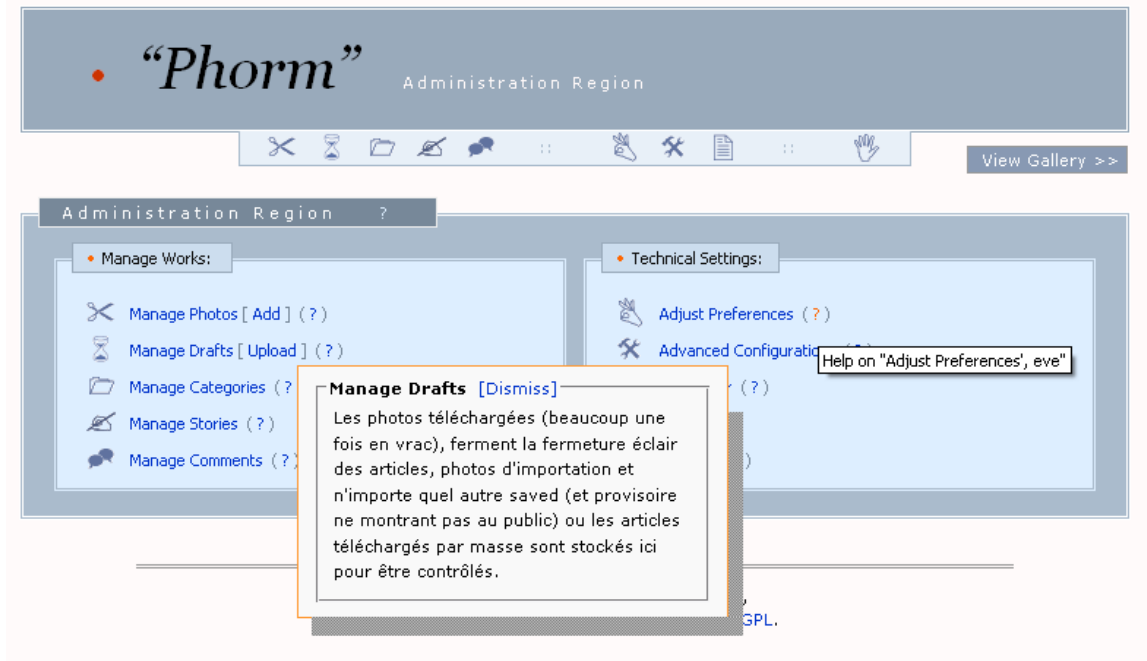


Some ideas of this UI are

- Shortcut icons bar in top of everywhere in administration area
- Using icons
- Separating tasks in two columns of management and setting
- Help system everywhere around

7.2.3 Help System

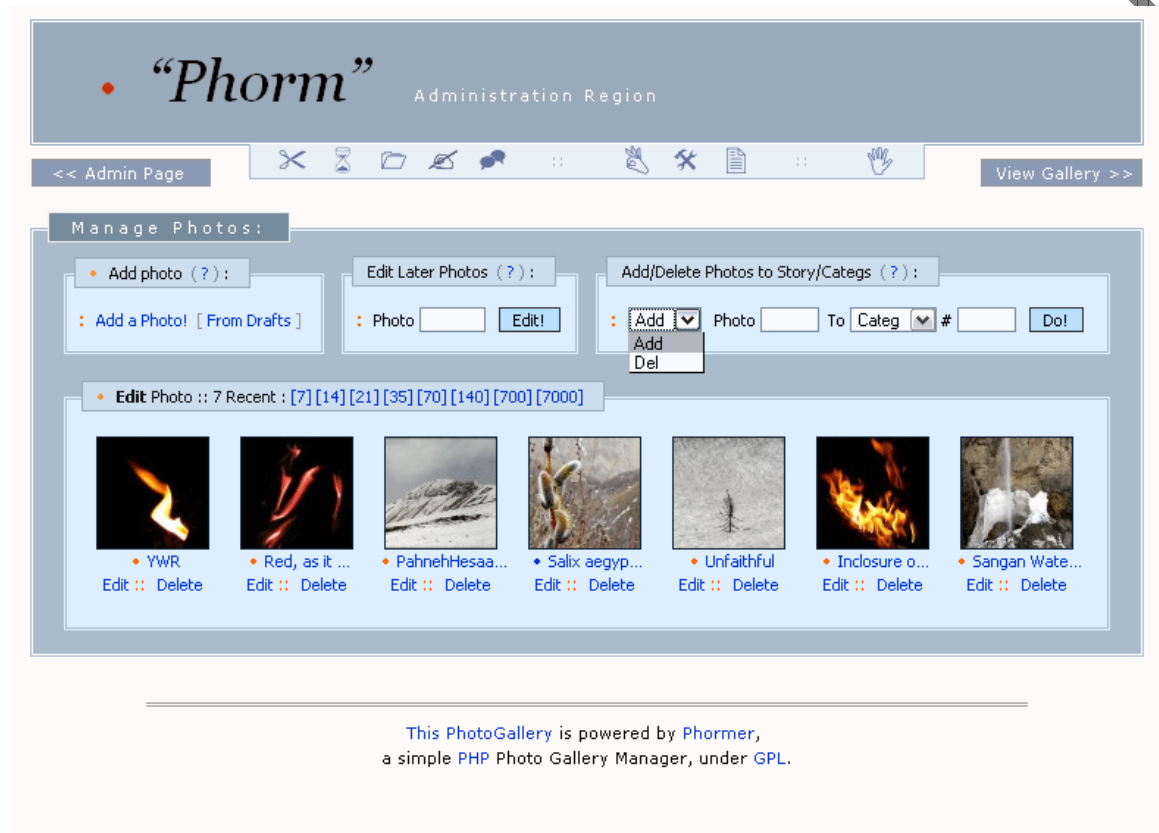
Clicking on any blue question will result a help box as below (currently in French help system).



7.2.4 Manage Photos

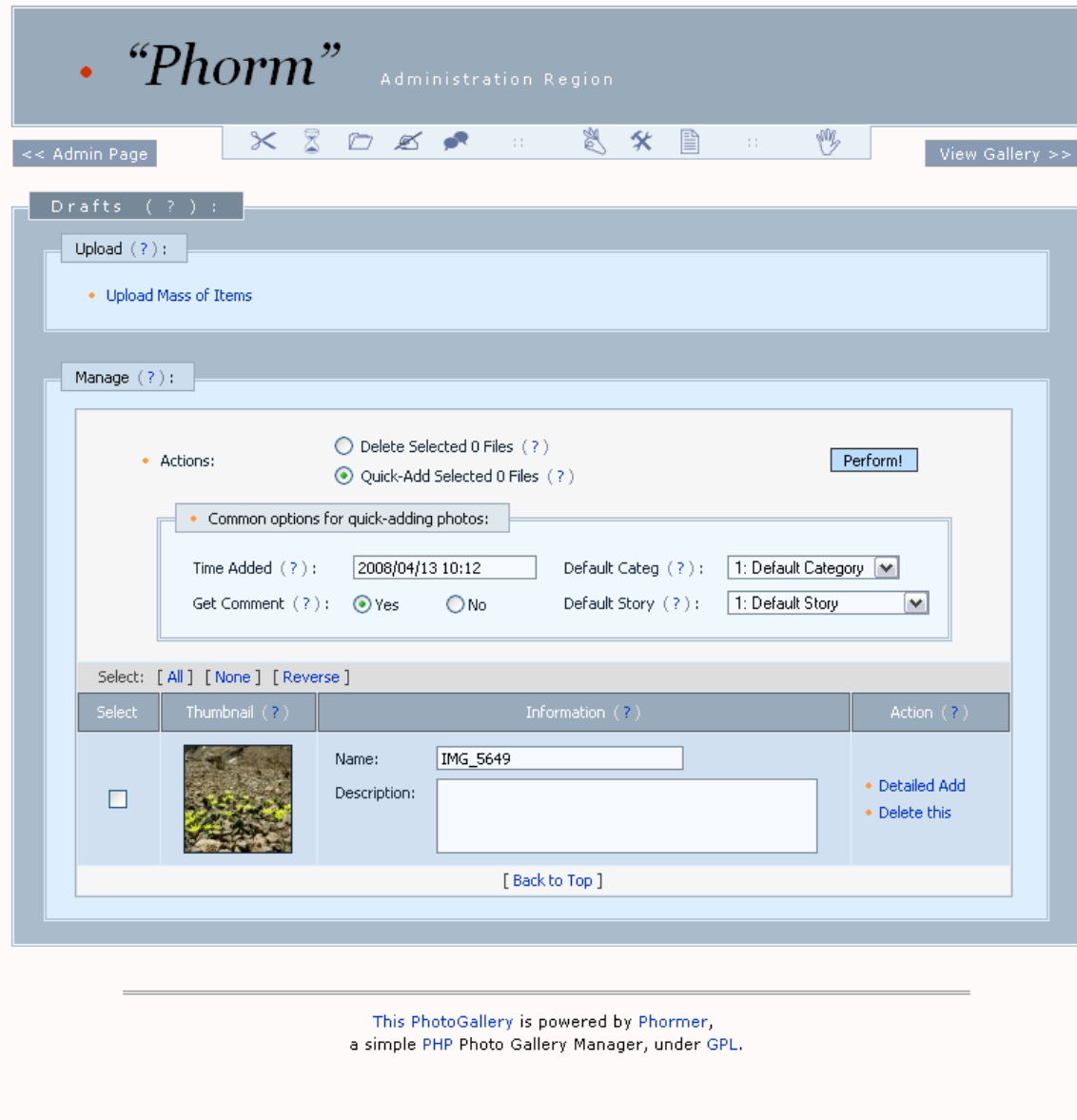
The short add/remove to/from category/story is the piece-of-art of this part.

So about quick links to edit, delete any of the recent items.



7.2.5 Manage Drafts

Quick option of mass-add is one exclusive of features of Phormer in this part.



The screenshot shows the "Phorm" Administration Region interface. At the top, there's a header with the "Phorm" logo and "Administration Region". Below the header is a navigation bar with a "<< Admin Page" button, a series of icons (scissors, hourglass, folder, pencil, speech bubble, double colon, hand, double slash, document, double colon, hand), and a "View Gallery >>" button. The main content area is titled "Drafts (?) :". It contains two sections: "Upload (?) :" with a link "Upload Mass of Items", and "Manage (?) :". The "Manage (?) :" section has a sub-section "Actions:" with two radio buttons: "Delete Selected 0 Files (?)" and "Quick-Add Selected 0 Files (?)". A "Perform!" button is to the right. Below the actions is a sub-section "Common options for quick-adding photos:" with four fields: "Time Added (?) :" (2008/04/13 10:12), "Default Categ (?) :" (1: Default Category), "Get Comment (?) :" (Yes/No radio buttons), and "Default Story (?) :" (1: Default Story). Below these is a "Select:" section with links "[All]", "[None]", and "[Reverse]". The main table has four columns: "Select", "Thumbnail (?)", "Information (?)", and "Action (?)". The first row shows a checkbox, a thumbnail of a plant, a "Name:" field with "IMG_5649", a "Description:" field, and two links: "Detailed Add" and "Delete this". A "[Back to Top]" link is at the bottom of the table. At the very bottom, a footer states: "This PhotoGallery is powered by Phormer, a simple PHP Photo Gallery Manager, under GPL."

7.2.6 Add Photo

Handy Add-Photo and thumbnail selection menu is implemented in UI of this part. The thumbnail selection (using javascript) is a brilliant feature of Phormer.

STL PHP Gin SAD Dvorak INOI 862.html Quiz OS - Teh OS-BOOK.COM la grammaire Socket line.c

Manage Photos of Phorm SourceForge.net: Files Gmail - Phormer slovak translation - ai... Manage Photo

Administration Region

<< Admin Page View Gallery >>

<< Manage Photos

• Add Photo:

Step 1 - Locate the Photo (?) :

The photo "IMG_4279.jpg" is uploaded successfully and is saved in Drafts part!

Step 2.1 - Global data (required) (?) :

Title (?) : IMG_4279

Description (?) :

Time Added (?) : 2008/04/13 10:15

Get Comment (?) : ☒ Yes ☐ No

Photo: Get Comments [Dismiss]

Let visitors leave comments for it (these in drafts) or not.

Step 2.2 - Special features (optional):

Photo info (?) :

Default Categ (?) : 17: Fire

Default Story (?) :

Date Taken (?) :

Hits & Rate (?) :

Thumbnail Preview:

Step 4 - Submit:

Add the Photo Reset Changes Sorry, Just leave here!

This PhotoGallery is powered by Phormer, a simple PHP Photo Gallery Manager, under GPL.

7.2.7 XML Editor

Built-in XML Editor allows quick edit of database entries.

The screenshot shows the "PhotoGallery" Administration Region interface. At the top, there's a header with the site name and "Administration Region". Below this is a navigation bar with "<< Admin Page" and "View Gallery >>" buttons, and a central toolbar with various icons. The main content area is titled "XML Editor:" and contains two side-by-side panels. The left panel, "Edit Content:", lists categories like Categories, Stories, Photos, Comments, Basis, and Visits, with a text input for "XML Source" set to "data/categories.xml" and an "Open the File" button. The right panel, "Restore Backup:", has the same category list, the same "XML Source" input, and a "Restore Backup" button. Below these panels is a section titled "XML Content of 'data/categories.xml':" containing a text area with XML code. The code starts with a declaration and an root element, followed by a tag and a block containing several tags with CDATA values. At the bottom of the XML content area are "Save Changes" and "Reset Changes" buttons.

• “PhotoGallery” Administration Region

<< Admin Page View Gallery >>

XML Editor:

Edit Content:

- Categories
- Stories
- Photos
- Comments
- Basis
- Visits

XML Source: data/categories.xml

Open the File

Restore Backup:

- Categories
- Stories
- Photos
- Comments
- Basis
- Visits

XML Source: data/categories.xml

Restore Backup

XML Content of "data/categories.xml":

```
<?xml version='1.0' encoding='UTF-8' ?>
<Xmldata>
  <lastcid><![CDATA[18]]></lastcid>
  <Category id="1">
    <photo><![CDATA[1]]></photo>
    <photo><![CDATA[256]]></photo>
    <photo><![CDATA[260]]></photo>
    <photo><![CDATA[262]]></photo>
    <photo><![CDATA[263]]></photo>
    <photo><![CDATA[264]]></photo>
    <photo><![CDATA[265]]></photo>
  </Category>
</Xmldata>
```

Save Changes Reset Changes

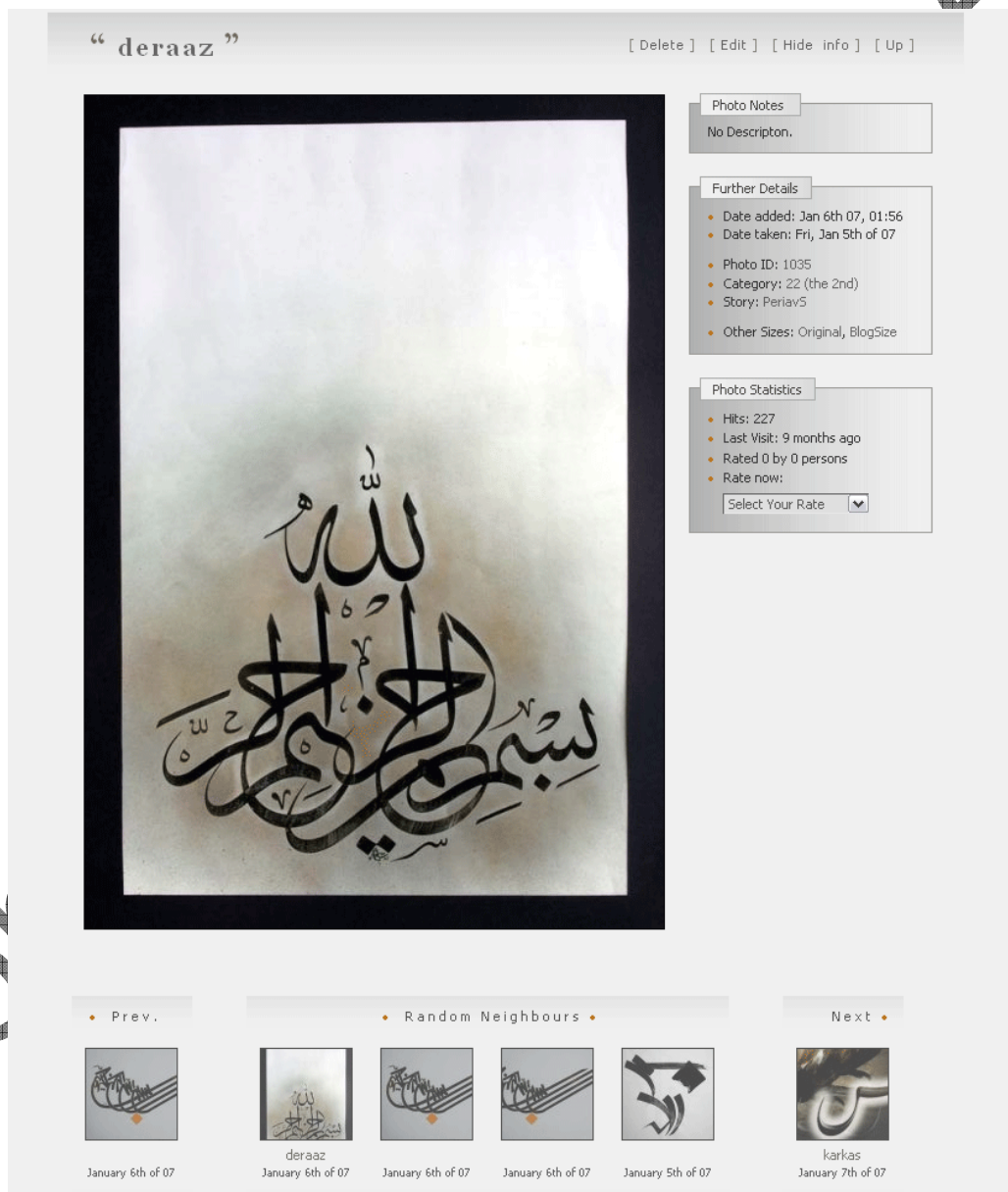
7.3 Visitors' Side

This part includes all the UIs generated by index.php to outside user.

7.3.1 Single Photo (Vertical)

One previous, one next and 5 neighbors thumbnails are below each photo in order to let Visitor navigate easily around the photo gallery.

Description (entered by user), Photo details (Date, ID, category, ...) and Statistics (from Stat DB or photos.xml) are each in its own particular box next to the photo.



7.3.2 Single Photo (Horizontal)

In Horizontal Photos, the boxes automatically drop below the photo, using float style of CSS in HTML.

[\[Delete \]](#) [\[Edit \]](#) [\[Hide info \]](#) [\[Up \]](#)

Photo Notes
No Descripton.

Further Details

- Date added: Jan 6th 07, 01:43
- Date taken: Fri, Jan 5th of 07
- Photo ID: 1032
- Category: 22 (the 2nd)
- Story: PeriaVS
- Other Sizes: BlogSize

Photo Statistics

- Hits: 8
- Last Visit: 9 months ago
- Rated 0 by 0 persons
- Rate now:

[• Prev.](#)

January 5th of 07

[• Random Neighbours •](#)

January 6th of 07

January 6th of 07

January 5th of 07

January 6th of 07

[Next •](#)

January 6th of 07

7.3.3 Slide Show

Buttons of Next, Previous are both below the photo and above. A timing menu is placed also in top middle.

Date and Description is below and a [smaller Size] in top right allows visitor to have a faster (due to reduction of file size) show.



7.3.4 Commenting

Nested commenting (using feature of “reply-to”) allows nicer communication between visitors.

As a new feature, admin can pick (as admin) button to suppress necessity of entering name, email and etc.

The screenshot displays a web interface for commenting. At the top, there are two nested comment blocks. The first block shows a comment by 'Admin (Aideen & "himself")' on Jan 7th of 07 at 19:14, with the text 'grep other' and a '[Reply]' link. The second block shows a reply by 'Admin (Aideen & "himself")' on Feb 16th of 07 at 20:01, with the text 'grep other reply' and a '[Reply]' link. Below these are three more comment blocks by 'Aideen' on Jan 7th of 07 at 19:03, 19:04, and 19:04, with texts 'adf', 'baha!', and 'boha' respectively, each with a '[Reply]' link. At the bottom, there is a section titled 'Leave your own comment'. It features two radio buttons: 'As Admin' (selected) and 'As Other'. Below these are input fields for 'Name:', 'Email:', 'Webpage:', and 'Word verification:'. The 'Word verification' field contains the text '71031'. A large text area for the comment is located below the input fields, and a 'Submit Comment' button is at the bottom.

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8 Designing Databases (Relations)

Review's History

Version	Reason of Updating	Update Date
1.0	Initialing the report, first version	01 April, 2007 (۱۳ فروردین ۸۷)

8.1 Introduction

As the database used for Phormer is not Table-Based, methodology of integrating them is a bit different than regular.

Actually, performance of the system (with optimum file openings) was the main concern in design of Database. You may know that in XML files, entire file should be read before any data becomes ready.

8.2 Filing System

The ideas in this part can be told as:

- In order to have “most-recent-visited photos” in first page, all statistics of the photos should be read. This option was mandatory as could bring real dynamism to the system. Hence, **stat defined as a weak entity** and all stats stored in a single file with least needed information (photos.xml)
- Some other information of each photo (like name, description, etc.) were needed only on-show. On the other words, not all names of the photos needed to be read before first page be generated. This way, in order to reduce overhead of the system, **each photo contains its attributes in its own file** named p_XXXXXX.xml (where 6 Xs are its id)
- Categories and Stories were only containers and their growth rate was nearly 1 or 2 line per photo. This way, they all kept in two files categories.xml and stories.xml
- Finally comes comments! Statistics of Photo Galleries showed that each photo has almost 3 comment in average in a normal photo gallery (~1000 hits per day). This way, all comments integrated in comments.xml file.

8.3 Table-Based Database

At the moment, no Table-Based Database (as for MySQL) is done for the project. Though, regard to ER diagrams and current system, such DB can be implemented easily.

The reason MySQL is not supported is the title of the project in SourceForge (PHP without MySQL photogallery manager!). So is search result for “PHP without MySQL photogallery manager” in google that leads visitors to Phormer.

Though, adding support of SQLite (SQL with no heavy support) is on the plans;

9 User Manual

Review's History

Version	Reason of Updating	Update Date
1.0	Initialing the report, first version	01 April, 2007 (۱۳ فروردین ۸۷)

9.1 Installation Manual

9.1.1 Requirements

- A web-server with at least one MB free size and PHP (version ≥ 4.2)
- GD library of PHP MUST be available and set in PHP handler (Apache)

9.1.2 Installation How-To

One of basic concepts of design of Phormer had been ease of use. This way Installation has been simplified till reaching **Just extract a zip file!** See the step:

1. First download [latest version of Phormer](http://p.horm.org/er) (from <http://p.horm.org/er> or SF mirror)
2. Unzip that .zip file to your destination directory (let us name it /www/phormer/).
3. `chmod 777 /www/phormer` (where /www/phormer is your unzipping folder).
4. Access the path from your web-browser (i.e. `http://{YourServer}/phormer/`) and fill a few inputs there, till reaching the **Installation Completed!** Message.
5. Finally, `chmod 711 /www/phormer` to ensure the security issues.

That's all!

9.1.3 Upgrade How-To

1. First download [latest version of Phormer](http://p.horm.org/er) (from <http://p.horm.org/er> or SF mirror).
2. Replace all the files in the .zip of the newest version into your installation directory.
namely, delete `files/` directory of your phormer, and all the files in root of installation directory (e.g. `admin.php`, `index.php`, `upload.php` & etc.) **except of `index.xml`**, and then copy all of the removed files (or may more) from the .zip file into your directory.
3. Replace `files/` of downloaded .zip and all the files in root of that (which are similar to removed files), to your installation directroy.

9.2 User Manual

As Phormer is a CMS, basic users are its visitors and they don't need/read any manual! Though, the UI had been developed self-descriptive so that visitors don't lose in site.

On the other hand, a help system is provided for the Administration side, in order to provide real-time (and close) help at the moment it is needed.

This way, a User Manual doesn't take place into system.

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10 Final words

This Part is added by the author (Aideen NasiriShargh) and had not been a part of deliverable outcomes. Here are a few points which had no other place to be said, or worth repeating:

1. Phormer is a light package for single users, rather than an enterprise one
2. Phormer's development was an empirical method. Though, using academic methods (DFD, ERD, time scheduling, ...), if were added from the first, could improve it too much. However, now and with this documentation, a way to get help of volunteer recruits is opened :)
3. A goal of Phormer had been not to rely on MySQL and be small and light. It still is. This is why the plan of adding MySQL support is stopped.
4. Translations are valuable motivations! French, Italian and Slovak (at the moment) are great points of Phormer. It's going on, now supposed to come in 10 languages, soon.
5. More than 50 requested features of Phormer is the way it's still open and improving!
6. More than [11,000 downloads](#) in two years, and lots of testimonials in emails, are showing that Phormer is an accepted Project among its users!